

PUDLAK, Pavel, MUDr.

HERMANSKY, Frantisek, MUDr; DIENSTBIER, Zdenek, MUDr; PUDLAK, Pavel, MUDr;
MALY, Vladimir, MgMat, statistické spracovani.

Effect of barbiturate anesthesia on eosinophils following various
types of stress in rats. Cas.lek.cesk. 93 no.24:641-645 11 June 54.

1. Z Prvni kliniky chorob vnitřních, prednosta prof. Dr M.Hetousek
(Vor Hermansky, Dienstbier, Pudlak) 2. Z Ustavu pro organisaci
zdravotnictvi, prednosta prof. Dr V.Prosek. (for Maly)

(STRESS, experimental,

eff. of barbiturate anesth. on eosinophil count in white
rats after stress)

(BARBITURATES, anesthesia and analgesia,

eff. on eosinophil count after stress in white rats)

(EOSINOPHIL COUNT,

eff. of barbiturate anesth. on eosinophils after stress
in white rats)

(ANESTHESIA,

barbiturate, eff. on eosinophil count after stress in
white rats)

CHASIDOVSKIA

CHERAKOV, P.; PUDLAK, P.

1. Laboratory for Pathophysiology of Blood and Liver of the First Internal Medicine Clinic of Charles University (Laborator pro patofysiologii krvetvorby a jater pri I. vnitřní klinice EU), Prague; 2. Institute of Haematology and Blood Transfusion (Ústav hematologie a krevní transfuze), Prague

me, Vnitřní lékařství, No 6, 1964, pp 763-766

"Fatal Hemorrhagic States."

PUDLAK, P.; FARSKA, I.; DEIMLOVA, E.

On the demonstration of increased fibrinolysis by different methods. Vnitřní lek. 11 no.2:145-151 F '65

1. Ústav hematologie a krevní transfuze v Praze (ředitel: prof. MUDr. J. Horejší, Dr.Sc., člen korespondent Československé akademie věd).

X1 2
HEŘMANSKÝ, F., MU Dr; PUDLÁK, Pavel, MU Dr.

Laboratory for Pathophysiology of Blood Building and
Liver with the First Internal Medicine Clinic --
Prague (Laboratoř pro patofyziologii krevetvorby a
jater při I. interní klinice -- Praha); Chief: V.
HOENIG, Prof. Dr; Institute of Hematology and Blood
Transfusion -- Prague (Ústav hematologie a krevní
transfúze -- Praha); Chief: J. HOŘEJŠ, Prof. Dr.

Prague, Praktický lékař, No 24, 1962, pp 1009-1012

"Current Review of Hemocoagulation and Hemostasis."

PUDLAK, P.; VORLOVA, Z.; STARA, I.; DEIMLOVA, E.

Coagulation properties of tissue thromboplastin from the viewpoint of control of anticoagulant therapy. Cas. lek. cesk. 101 no.22:695-700 1 Je '62.

1. Ustav hematologie a krevni transfuze, Praha, prednosta prof. dr. J. Horejsi.

(ANTICOAGULANTS therapy)
(THROMBOPLASTIN chemistry)

PUDLAK, Pavel

Modern views on the synthesis of thromboplastin, Cas.lek.cesk.
99 no.1:8-17 3 Ja '60.

1. Ustav hematologie a krevni transfuze, Praha, reditel prof.dr.
J. Horejsi.

(THROMBOPLASTIN)

PUDLAK, P.; HERMANSKY, F.; DIENSTBIER, Z.

SCIENCE

Periodicals: CESKOSLOVENSKA FYSIOLOGIE Vol. 4, no. 4, 1955

PUDLAK, P.; HERMANSKY, F.; DIENSTBIER, Z. Attempt to inhibit the leucocytic process in rats after an anesthetic dose of urethan, p. 460

Monthly List of East European Accessions (EFAI) LC, Vol. 8, No. 5,
May 1959, Unclass.

PUDLAK, Pavel; DEIMLOVA, Erika; STARA, Irena

Relation of tissue thromboplastin to serum coagulation activity.
Cas.lek.cesk. 99 no.7/8:224-231 19 160.

1. Ustav hematologie a krevni transfuze v Praze, prednosta prof.
dr. J. Horejsi.
(THROMBOPLASTIN)

HUDLAK, P.

SCIENCE

Periodicals: CESKOSLOVENSKA FYSIOLOGIE Vol. 4, No. 4, 1955

HERMANSKY, F. ; HUDLAK, P.; DIENSTBIER, Z. Effect of adrenalectomy and splenectomy on leucocytic changes after an anesthetic dose of urethan in rats. p. 455.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5,
May 1959, Unclass.

CZECHOSLOVAKIA/Human and Animal Physiology. Blood. Blood
Coagulation.

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93131.

Author : Padlak, P., Sochran, J., Dajdlova, E., Pospisilova, V.
Inst :
Title : Study of Formation of Thromboplastin. I. Influence
of SH-Groups.

Orig Pub: Physiol. Bohemosl., 1957, 6, No 3, 339-400.

Abstract: A study was conducted on the action of cysteine (I),
glutathione-SH (II), mercuric chloride (III), azidone
(IV), formaldehyde (V), and l-ascorbic acid (VI) on
the formation of thromboplastin (T) and on results of
Quick's tests in vitro. I, II, and III inhibited for-
mation of T. But addition of them after 5 minutes to

Card : 1/2

CZECZOGLOWSKI/Human and Animal Physiology. Blood. Blood
Coagulation.

T

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93131.

a reacting mixture, when T was already formed, did not
reveal an inhibiting action. IV exerted a negligible
influence on the formation of T, and V and VI were in-
active. -- V. Ye. Pastereva.

Card : 2/2

PUDLAK, P.

Changes in the factor VII, X and prothrombin during the course of blood coagulation. Vnitřní lek. 11 no.8:797-807 Ag '65.

1. Ústav hematologie a krevní transfuze v Praze (ředitel prof. MUDr. J. Horejší, DrSc.) člen korespondent Československé akademie věd.

PUDLIK, W.

TECHNOLOGY

PERIODICAL: ARCHIWUM PUDOWY MASZYN Vol. 5, no. 4, 1958

PUDLIK, W. Minimum work of industrial installations for extracting oxygen from the air. p. 529.

Monthly List of East European Accessions (EEAI) LC, Vol 8, no. 4.
April 1959, Unclass

LIBANSKY, J.; BRABEC, V.; MALASKOVA, V.; PUDLAK, P.

Post-transfusion hemolytic reactions without kidney function disorders. Cas.lek. ~~100~~ 100 no.37:1157-1162 15 S '61.

(BLOOD TRANSFUSION compl) (HEMOLYSIS)

Country : CZECHOSLOVAKIA
Category= : Human and Animal Physiology. I
 : Blood. Blood Coagulation.
Abs. Jour. : Ref Zhur-Biol., No 23, 1958, 106354
Author : Pudlak, P.; Sochman, J.; Dejmlova, E.*
Institus. :
Title : Studies of Thromboplastin Formation.

Orig. Pub. : Ceskosl. fysiол., 1957, 6, No 3, 404-412

Abstract : No abstract.

Card: 1/1
 *Pospisilova, V.

FIRGANEK, Alojzy; PUDLIK, Stefan

Bonuses for white collar workers in building and assembling enterprises. Praca zabezp spol 6 no.9:15-25 S '64.

PUDLO, W.

The relation between technoeconomic indicators $E(2)$ and $K_a(2)$ and the function λ
(2). p. 345.

ARCHIWUM GORNICTWA. (Polska Akademia Nauk. Komitet Gornictwa) Warszawa, Poland
Vol. 3, no. 4, 1958.

Monthly list of East European Accessions Index (EEAI), IC, Vol. 8, no. 6, June 1959
uncla.

HELFRICHT, Rolf, Assistent; PUDLO, Wiktor, Adiunkt.

Influence of the limits of the separation argument on the distribution curves. Archiw gorn 8 no.3:219-255'63.

1. Institut fur Aufbereitung, Bergakademie, Freiberg (for Helfricht). 2. Institut fur Aufbereitung, Bergakademie, Krakow (for Pudlo).

PUDIKOV, D.

Short seminars on finance. Fin.SSSR 18 no.7:56-57 J1 '57.
(MLRA 10:7)

(Finance--Study and teaching)

PUDIKOV, V.K., inzhener; LYUDEKEVICH, A.V., inzhener.

Building a pumping station in Dnepropetrovsk with concrete
work done from afloat. Stroi.prom. 34 no.3:16-18 Mr '56.

1. Test Dneprovskpromstroy.
(Dnepropetrovsk--Pumping Stations)

PUDNIK, F.P.

[Sewing of custom-made suits and coats for women] Individual'nyi poshiv
zhenskogo verkhnego plat'ia. Moskva, Gos.izd-vo mestnoi promyshl.^{ESPSR},
1952. 365 p.

(MLRA 6:7)
(Dressmaking)

RUSAKOV, Sergey Ivanovich, kandidat tekhnicheskikh nauk; FUDNIK, F.P.; SAVOSTITSKIY, A.V.; TRUKHAN, G.L.; EPPEL', S.S.

[Sewing technology] Tekhnologiya shveinogo proizvodstva. Moskva, Gos. izd-vo Ministerstva legkoi i pishchevoi promyshl., 1953. 656 p. (MLRA 6:12)
(Clothing industry)

PUDOVKIN, M.A.

Solution of a very simple problem in radial in filtration. Uch.
zap. Kaz. un. 117 no.9:3-5 '57. (MIRA 13:1)

1. Fiziko-matematicheskii fakul'tet Kazanskogo gosudarstvennogo
universiteta im. V.I. Ul'yanova-Lenina. Kafedra obshchey matematiki.
(Oil sands--Permeability)

NEYMAN, M.B.; PUDOV, V.S.

Effect of inhibitors on the decomposition of polypropylene
hydroperoxide. Izv. AN SSSR. Otd.khim.nauk no.5:932 My '62.
(MIRA 15:6)

1. Institut khimicheskoy fiziki AN SSSR.
(Propylene oxide) (Inhibition (Chemistry))

TYABIN, N.V.; PUDOVKIN, M.A.

Flow of viscoplastic fluid disperse systems in conical packing and
the immersion of the cone in disperse systems. Trudy VNIPI no. 17:
94-108 '52 [publ. '53]. (MIRA 12:11)
(Fluid dynamics)

ALEKSANDROV, B.A.; PUDOVKIN, M.I.; YANOVSKIY, B.M.

The magnetic field of magnetic disturbances in the Arctic and the
Antarctic. Magn.-i onosf. vozm. no.1:17-23 '59. (MIRA 13:1)
(Arctic regions--Magnetism, Terrestrial)
(Antarctic regions--Magnetism, Terrestrial)

69099

S/049/60/000/03/015/019
E131/E691

3.9100

AUTHOR: Pudovkin, M.I.

TITLE: The Origin of Bay Disturbances

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, Nr 3,
pp 484-489 (USSR)

ABSTRACT: Investigations were carried out on bay-shaped magnetic disturbances in the northern part of West Siberia (near the auroral zone) in 1953, 1954 and 1957 (Fig 1) by the Institute of Geology of the Arctic represented by B.A. Aleksandrov, S.M. Kryukov, D.V. Levin and I.M. Pudovkin. The results of analysis showed the following. The sources of bay-shaped magnetic disturbances are clouds of high ionization moving at a speed of about 120 m/sec. The relationship found between the vector of the disturbance field with the direction of the wind in the ionosphere and the normal terrestrial magnetic field attests that the mechanism of excitation of electric currents in the ionosphere is a dynamo effect. The electric currents responsible for the bay-shaped disturbances flow in the ionosphere in the form of broad belts (400-600 km wide). The altitude of the currents corresponds to the E-layer. The mean current density

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The Origin of Bay Disturbances

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equals $8 \times 10^{-9} \text{ A/cm}^2$ from which the author concludes that the electron density in the auroral zone reaches 10^5 to 10^6 electrons/ cm^2 during periods of bay-shaped disturbances. This has been confirmed by the results of observations of polar light intensity (Ref 13). There are 4 figures, 4 tables and 13 references, 4 of which are Soviet, 1 German and 8 English. ✓

ASSOCIATION: Leningradskiy gosudarstvennyy universitet im. A.A. Zhdanova
(Leningrad State University imeni A.A. Zhdanov)

SUBMITTED: March 28, 1959

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18(5)

SOV/80-32-3-6/43

AUTHORS: Fudovkina, O.I., Kireyeva, M.V., Morgunova, E.M.

TITLE: On the Mineralogical Composition of the Calcined Mass in the Production of Bichromate (O mineralogicheskom sostave prokalennoy massy v proizvodstve khrompika)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol XXXII, Nr 3, pp 499-504 (USSR)

ABSTRACT: The calcined mass obtained in the production of chromium is investigated here as to its metal content. In all samples large yellow crystals of pure sodium chromate were detected. Crystals with another refraction index were identified as calcium chromate. Table 2 shows the chemical analysis of the various samples. An aqueous extraction contained calcium chromate amounting to 2 - 4% of the total chromate content. The insufficient amount of soda in the charge and the specific conditions of calcination do not allow the reaction of sodium chromate formation to proceed to completion. A considerable percentage of the chromium remains included within other minerals causing losses of chromium in the production. Professor V.V. Lapin helped in the investigation.

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SOV/EO-32-3-6/43

On the Mineralogical Composition of the Calcined Mass in the Production of
Bichromate

There are 3 tables, and 5 Soviet references.

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy khimicheskiy institut (Ural
Scientific Research Chemical Institute)

SUBMITTED: November 26, 1957

Card 2/2

U-4

CZECHOSLOVAKIA/General Problems of Pathology. Tumors

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 32537

Author : Hermensky Frantisek, Possnerova Vera, Pudlek Pavel,
Dionstbior Zdonok, Sterba Otakar.

Inst : Not Given

Title : The Influence of Preliminary Exposure and Splenectomy in the
Development of Transplanted Mouse Leukemia.

Orig Pub : Ceskosl. onkol., 1956, 3, No 4, 305-312

Abstract : Mice of the same line were administered intraperitoneally
with a six-week ♀ C57bl(78) per 0.1 ml of homogenate of leu-
kemic liver. They performed the splenectomy 4-6 days, exposure
(200 r) for 18-20 hours before the introduction of the homo-
genate. Average continuation of life in the ♀ controls 18.45
days, during splenectomy 25.2 days, during exposure 15.45 days.
In mice exposed earlier than the others, a significant in-
crease of the general leukocyte count was observed, in spite
of the fact that after exposure leukopenic set in. Fifteen
days after transplantation, the number of leukocytes in them

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comprised on the average 230 thousand in 1 mm², with 87 thousand in the control. In those animals where splenectomy occurred, the number of leukocytes is higher (900 thousand) than in the controls. With the increase of the number of leukocytes in the blood of animals of all groups, many polymorphic lymphoblasts were observed. The average weight of the liver in relation to the general weight of the animal in the mice undergoing splenectomy was 12.5 g%, in those exposed 8, in the controls 9.943 g%. In the animals undergoing splenectomy, the increase of lymph nodes is more strongly expressed.

Card : 2/2

HERMANSKY, F.; DIENSTBIER, Z.; PUDLAK, P.

Coagulating activity of blood serum and problem of anticogulant therapy.
Cas. lek. cesk. 92 no.16:419-426 17 Apr 1953. (CLML 24:4)

1. Of the First Internal Clinic (Head--Prof. M. Netousek, M. D.) of
Charles University, Prague.

PUDLAK, P.; HERMANSKY, F.; DIENSTBIER, Zd.

Evaluation of leukocytic reaction in rats following administration of narcotic dose of urethane. Chekh. fiziol. 4 no.4:430-437 1955.

1. Interne Klinik, Prag. Statistische Verarbeitung: Mag. mat. V.
Maly. Institut fur Organisation des Gesundheitswesens, Prag.

(URETHANE, anesthesia and analgesia,

eff. on leukocyte count responses to various
experiments)

(LEUKOCYTE COUNT,

eff. of urethane anesth. on responses to various
experiments)

(ANESTHESIA,

urethane, eff. on leukocyte count responses to various
experiments)

PUDLAK, P., AND OTHERS.

Study of the formation of thromboplastin. I. Effect of the "SH" groups.

p. 404 (CESKOSLOVENSKA FYSIOLOGIE) Vol. 6, no. 3, Aug. 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

PUDIAK, P.; SOCHMAN, J.; DEJMLOVA, E.; POSPISILOVA, V.

Studies on synthesis of thromboplastin. I. Effect of SH groups.
Gesk. fysiolo. 6 no.3:404-412 Aug 57.

1. Ustav hematologie a krevni transfuze, Klinicke oddeleni UHKT, Praha.
(THROMBOPLASTIN,
synthesis, eff. of sulphydryl groups (Cz))
(SULPHYDRYL COMPOUNDS, effects,
on thromboplastin synthesis (Cz))

PUDLAK, P.; HERMANSKY, F.; DIENSTBIER, Z.

Experience with blocking of leukocytic reaction in rats following narcotic dose of urethane. V. Neurohumoral regulation of leukocyte count. Cesk. fysiол. 4 no.4:460-466 22 Oct 55.

1. I. interni klinika lek. fak. KU, Praha. Statisticke zpracovani MgMat, V. Maly, Ustav pro organisaci zdravotnictvy, Praha.

(LEUKOCYTE COUNT,

eff. of hypophysectomy & heparin in urethane anesth.)

(PITUITARY GLAND, effect of excision,

on leukocyte count in urethane anesth.)

(URETHANE, anesthesia and analgesia,

eff. on leukocyte count, eff. of hypophysectomy & heparin on reactivity.)

(HEPARIN, effects,

on leukocyte count in urethane anesth.)

HERMANSKY, F.; PUDLAK, P.; DIENSTBIER, Zd.

Effect of adrenalectomy and splenectomy on leukocytes following administration of narcotic dose of urethane in rats. IV. Neurohumoral regulation of leukocytes. Chekh. fiziol. 4 no.4: 424-429 1955.

1. I. Interne Klinik, Prag. Statistische Verarbeitung: Mag. mat. VI. Maly Institut fur Organisation des Gesundheitswesens, Prag.

- (ADRENAL GLANDS, effect of excision,
on leukocyte count in urethane anesth. in rats)
- (SPLEEN, effect of excision,
on leukocyte count in urethane anesth. in rats)
- (URETHANE, anesthesia and analgesia,
eff. on leukocyte count response to adrenalectomy &
splenectomy)
- (LEUKOCYTE COUNT,
eff. of adrenalectomy & splenectomy in urethane anesth.)
- (ANESTHESIA,
urethane, eff. on leukocyte count, response to
adrenalectomy & splenectomy)

HERMANSKY, F.; PUDLAK, P.; DIENSTBIER, Z.

Effect of adrenalectomy and splenectomy on leukocytic changes following narcotic dose of urethane in rats. IV. Neurohumoral regulation of leukocyte count. Cesk. fysiол. 4 no.4:455-459 22 Oct 55.

1. Interni klinika lek. fak. KU, Praha Statisticke zpracovani
MGMat. V. Maly, Ustav pro organisaci zdravotnictvi, Praha.

(ADRENAL GLAND, effect of excision,
leukocyte count in urethane anesth.)

(SPLEEN, effect of excision,
on leukocyte count in urethane anesth.)

(URETHANE, anesthesia and analgesia,
eff. on leukocyte count, eff. of adrenalectomy &
splenectomy on reactivity)

(LEUKOCYTE COUNT,
eff. of adrenalectomy & splenectomy in urethane anesth.)

HERMANSKY, Frant., MUDr.; PUDLAK, Pavel, MUDr.; MLEJNKOVA, Miroslava;
SPANKOVA, Helena

Unusual cases of hemorrhagic states from the group of so-called
hypothromboplastinamias. Cas. lek. cesk. 95 no.7:182-187 17 Feb 56.

1. Z I. kliniky chorob vnitruich KU, prednosta prof. MUDr.
M. Netousek.

(HEMORRHAGIC DIATHESIS,
hypoprothrombinemia.(Cz))

(PROTHROMBIN, deficiency,
hypoprothrombinemia (Cz))

PUDLAK, P., MUDr.; HERMANŠKY, Fr., MUDr.; DONNER, L., MUDr.

Treatment of bone marrow hypoplasia. Cas. lek. česk. 95 no.16:
431-434 20 Apr 56.

1. Z I. kliniky chorob vnitřních Karlovy university v Praze, pred.:
prof. MUDr. Miloš Netoušek a z II. kliniky chorob vnitřních Karlovy
university v Praze, pred. prof. MUDr. Antonín Vancura.

(BONE MARROW, diseases
hypoplasia, ther. (Cz))

PUDIÁK, Pavel. (Praha 2, U nemocnice 1.)

Studies on thromboplastic activity of the blood plasma following defibrination with thrombin. Cas. lek. česk. 97 no.27-28:841-845
4 July 58.

1. Technická spolupráce: E. Deimlova a V. Pospisilova. Ústav hematologie a krevní transfuze v Praze, přednosta prof. dr. J. Horejsi.

(BLOOD, PRESERVED,
thromboplastic activity after defibrination with thrombin
(Cz))

(BLOOD COAGULATION,
thromboplastic activity of blood after defibrination with
thrombin (Cz))

PUDLIK, Boguslaw

On the problem of surgical therapy of recurrent inguinal hernias.
Polski przegl. chir. 32 no.10:1021-1024 '60.

1. Z II Oddziału Chirurgicznego Szpitala im. dr A. Mieleckiego w
Cherzowie Ordynator: dr A. Paprotny. Z Oddziału Chir. Szpitala
im. Marceliego Nowotki w Krapkowicach Ordynator: dr B. Pudlik.

(HERMIA INGUINAL surg)

PUDLIK, W.

COUNTRY : Poland
 CATEGORY : Chemical Technology. Chemical Products and Their Applications. Production and Separation of Gases
 REF. JOUR. : Technik, No. 20 1959, No. 72158

AUTHOR : W. PUDLIK
 INST. :
 TITLE : Minimal Work of Oxygen Recovery from Air in Industrial Units

ORIG. PUB. : Arch. budowy maszyn, 1959, 5, No 4, 529-539

ABSTRACT : Theoretical analysis of a number of industrial systems of oxygen units which are based upon the principle of an adiabatic rectification column with a single source and a single discharge of heat, and with thermal pumps used to effect the transfer of heat from one temperature level to another. The only losses of heat taken into consideration are those due to irreversibility caused by change in temperature along the height of the column. A survey is made of low pressure oxygen unit systems of the Linde-Maskee and Linde type. -- Ya. Petrovskiy.

CARD:

PUDLIK, Wieslaw (Gdansk)

Works of the Department of Thermodynamics of the Institute of
Fluid Flow Machinery of the Polish Academy of Sciences on
problems of large-scale air separators. Inst masz przep
PAN no.11/12:303-308 '62.

29233
P/032/60/007/001/003/006
D265/D301

11.3140

AUTHOR:

Pudlik, Wiesław (Gdańsk)

TITLE:

Air rectifying column with argon fraction withdrawal

PERIODICAL:

Archiwum budowy maszyn, v. 7, no. 1, 1960, 35 - 52

TEXT: This paper analyzes theoretically the problem of separating the argon fraction from the rectifying column in order to produce simultaneously pure oxygen and pure nitrogen. The author makes use of the McCabe's and Thiele's method extended by J. Madejski (Ref. 1: Archiwum budowy maszyn, P.W.N. no. 4, 1958) which introduces two equilibrium diagrams in the oblique system of coordinates: one diagram for the molar liquid (x) and vapor (y) concentrations of nitrogen and the other for molar liquid (χ) and vapor (η) concentration of argon. The equilibrium lines for $N_2 - O_2$ and $N_2 - Ar$ are plotted on the nitrogen diagram (x, y) and $Ar - O_2$ and $Ar - N_2$ equilibrium lines are plotted on the argon (χ, η) diagram. The space contained between these lines represents the equilibrium points for

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X

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T265/D301

Air rectifying column ...

the mixture $N_2 = Ar + O_2$. For the purpose of analysis the following concentrations are assumed: $\eta_R = \eta_W = 0.4\%$, $y_R = 0.1\%$ (99.5 % pure oxygen) $y_W = 99\%$ (98.6 % pure nitrogen) and for air: $\eta_S = 0.932\%$ and $y_S = 78.1\%$. The method of analysis is described for the Elliot-Rescol column - Fig. 3 - fed by dry saturated vapor air. The letters W, R, A, S and C refer to nitrogen, oxygen, argon yield, air and liquid respectively, all in Kmole/Kmole. The mass balance equations for the appropriate constituents for the sections I-I, II-II, and III-III are written in terms of the reflux ratio denoted by $S = C/P$, where P = vapor content Kmole/Kmole at appropriate sections. The equations for the operational lines are obtained for section I-I

$$y = \xi x + y_W(1 - \xi), \quad (16)$$

$$\eta = \xi \chi + \eta_W(1 - \xi) \quad (17)$$

and

which start from points $x = y = y_W = 99\%$, an (x, y) diagram and

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Air rectifying column ...

from points $\chi = \eta = \eta_w = 0.4 \%$ on the (χ, η) diagram in Fig. 4. For the concentration of N_2 in the Ar yield equal to the concentration of N_2 in O_2 ($y_A = y_R = 0.1 \%$), the line joining points $x_s y_s$ and $x = y = y_A = y_R$ cuts the operational line in the point of coordinates $\eta = \eta_s = 0.952 \%$. From the operational lines of section I-I and II-II the "steps" are drawn until the point is reached for which $y = y_R = y_A$ determining the plate which η_A enables thus the last operational line to be determined which passes through the point $\eta = \chi = \eta_R$. The above method is used for describing several changes of nitrogen and argon vapor concentrations in the rectifying column depending on the number of the plates (NP) for various reflux ratios ξ ; and the influence of feed position on η_A . Normal, advanced and retarded feeds are considered and their influence on the argon yield is studied. The maximum argon yield is found when the air supplied is in equilibrium with the liquid on the feeding plate.

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Air rectifying column ...

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Values of $\xi = 0.42, 0.5, 0.55, \text{ and } 0.8$ were considered and it is found that for all these cases the max. argon concentrations occurs on the same plate (the 20th plate from the top of the 50th plate column). The influence of reflux ratio (ξ), number of feed plate (NPZ) and the number of the plate from which the argon fraction is withdrawn (NPA), an argon concentration in the fraction (η_A) and the overall number of plates (LP) is discussed and represented graphically. There are 21 figures and 3 Soviet-bloc references.

ASSOCIATION: Instytut maszyn przeplywowych pan w Gdańsku (Institute of Flow Machines PAS Gdańsk)

SUBMITTED: July, 1959

Card 4/5

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PUDLIK-PANKIEWICZ, Krystyna; SECOMSKA, Barbara; SZCZYGIEL, Aleksander

Diagnostic value of a morbid complex in the oral cavity partially attributed to niacin deficiency. *Pediat. Pol.* 37 no.5:481-488 My '62.

1. Z Zakladu Higieny Zywienia PZH Kierownik Zakladu: prof. dr med.
A. Szczygiel.

(MOUTH dis) (NICOTINIC ACID defic) (TONGUE dis)

COUNTRY : POLAND
CATEGORY : Chemical Technology. Chemical Products and Their^H
Application. Ceramics. Binding Materials.*
ABS. JOUR. : RZhKhim., No 17, 1959, No. 61582
AUTHOR : Pudlo, B.
INSTITUTE : -
TITLE : Several Remarks Pertaining to the World Production of Glass.
ORIG. PUB. : Szklo i ceram., 1958, No 10, 291- 292.

ABSTRACT : Presented are certain data pertaining to production of glass in 1950-1956 in USSR, Czechoslovakia, Yugoslavia, Japan, GDR and Hungary.
-- L. Sedov.

*Concrete.

Card: 1/1

H - 42

PHILCO, V.

TLC BICL OF

periodicals: ARCHIVUM GEOMETRICUM Vol. 3, no. 3, 1958

PHILCO, V. Some properties of curves λ and λ^* in cases of a more complicated form of the curve λ . p. 211.

Monthly List of East-European Accessions (EMAI) LC Vol. 8, no. 5
Mar 1959, Unclass.

PUDLO-PALONKA, Krystyna

Changes in the number and location of the population in the years
1931/33 - 1959. Przegl geogr 33 no.4:649-661 '61.

GRISHINA, Antonina Andreyevna; SERGEYEV, Nikolay Aleksandrovich;
KOROTKOV, S.N., ~~retsensent~~; SUBBOTIN, S.S., ~~retsensent~~;
PUDNIK, F.P., nauchnyy red.[deceased]; GUSEVA, A.I., red.;
KNAKNIN, M.T., tekhn. red.

[Technology of the tailoring of women's coats] Tekhnologiya
poshiva zhenskikh pal'to. Moskva, Rostekhzdat, 1962. 231 p.
(MIRA 16:4)

(Tailoring (Women's))

KOPTA, S.; NIEWODNICZANSKI, H.; PUDLOWSKA, B.

Coulomb excitation of rhodium nucleus. Acta physica Pol 26 no.6:
1133-1141 '64.

1. Institute of Nuclear Physics, Krakow. Submitted May 8, 1964.

PUDNIK, F.P.; MARGOLIN, L.Ya., redaktor; BASINA, M.A., retsenzent; PASTU-SHENOK, T.B., retsenzent; DROKHANOVA, Ye. N., redaktor; MEL'NIKOVA, N.V., tekhnicheskii redaktor.

[Custom tailoring of men's suits and coats] Individual'nyi poshiv verkhnego muzhskogo plat'ia. Moskva, Gos. izd-vo mestnoi promyshl. RSFSR, 1955. 342 p. (MIRA 9:6)
(Tailoring)

MUSIAL, L.; CHOBOT, M.; PUDO, J.

Water pollution in the Raba River. Gosp wodna 21 no.8:359 Ag '61.

MUSIAL, L.; PUDO, J.; LABUZ, W.

Water pollution of the Skawa River. Gosp wodna 21 no.8:360 Ag '61.

PUDO, Mieczyslaw, technik strzelniczy

How did I achieve economy in the consumption of explosives in longwalls? Wiadom gorn 13 no.11:404-405 N '62.

1. Kopalnia Czeladz.

Category : USSR/General Problems - Method and Technique of Investigation A-4

Abstr Jour : Ref Zhur - Fizika, No 3, 1957, No 5608

Author : Pudo, N.M.

Title : New VNIIM (Scientific Research Institute for Measures) Balance for Comparison of Standard Weights.

Orig Pub : Izmerit. tekhnika, 1956, No 3, 42-44

Abstract : Brief description of the constructional units of new balances, used in standard measurements of mass. The error of the measurement obtained with these balances is approximately one half that obtained with measurements on previously employed balances.

Card : 1/1

Pudo, T

✓ The hemolysin of *Escherichia coli*. Wladyslaw Kunicki-Goldfinger, Stanislaw Chariasz, and T. Pudo (Zaklad Mikrobiol., Lublin). *Acta Microbiol. Polon.* 4, 107-113 (1955).—No hemolysin (I) was found in cultures of 7 hemolytic strains of *E. coli*, grown under various conditions and in various media. Addn. of hemoglobin, stroma of erythrocytes, and lecithin to the culture medium, and growing *E. coli* in mixed cultures with a hemolytic *Bacillus*, did not promote the extracellular formation of I. Autolyzed bacteria filtrates had I activity. I is apparently an adaptive enzyme.

Max 3

I. Z. Roberts

KUNICKI-GOLDFINGER, Wl.; CHARIASZ, S.; PUDO, T.

Escherichia coli hemolysins. Acta mikrob. polon. 4 no.2:107-113
1955.

1. Z Zakładu Mikrobiologii Ogólnej UMCS w Lublinie.
(*ESCHERICHIA COLI*,
hemolysins)

VASILOV, S.I.; LOBOVIKOV, G.K.; PUDOV, V.F.

Lamp of shortwave ultraviolet rays fed from a battery. Vop.
kur. fizioter. i lech. fiz. kul't. 28 no.3:264 My-Je '63.

(MIRA 17:5)

1. Iz kafedry fiziki (zav.-dotsent S.I. Vasilov) Chitinskogo
meditsinskogo instituta (dir.-dotsent Yu.D. Ryzhkov).

ALTAYEV, Sh., PUDOV, M.S.

Methods of mining complex coal beds in the Karaganda Basin.
Izv.AN Kazakh.SS^R.Ser.gor.dela, met. i stroimat, no.11:14-22 '56.
(MIRA 10:1)

(Karaganda Basin--Coal mines and mining)

1. 10. 56.
PUDOV, M.S.

Increasing the productivity of the "Donbass" cutter loader in
Karaganda Basin. Trudy Inst. gor. dela AN Kazakh. SSR 1:170-176
'56. (MIRA 11:1)
(Karaganda Basin--Coal mining machinery)

MILLER, V.B.; NEYMAN, M.B., PUDOV, V.S.; LAFER, L.I.

Thermal oxidative degradation of polypropylene. Part 1: General characteristics of the oxidation reaction. Vysokom.soed. 1
no.11:1696-1702 N '59. (MIRA 13:5)

1. Institut khimicheskoy fiziki AN SSSR.
(Propene)

PUDOV, V.S.; NEYMAN, M.B.

Using chromatography to study the kinetics of the decomposition of
isotactic polypropylene peroxides. Neftekhimiia 2 no.6:918-923 N-D
'62. (MIRA 17:10)

1. Institut Khimicheskoy fiziki AN SSSR.

PUDOVA, N.P., aspirant

Involuntional functional changes of the spine in the X-ray picture,
Trudy 1-go MMI 38:221-234 '65. (MIRA 18:10)

S/0147/64/000/002/0081/0087

ACCESSION NR: AP4040974

AUTHOR: Pudoveyev, A. P.

TITLE: A method of supersonic analogy for calculating one-dimensional unsteady gas flows

SOURCE: IVUZ. - Aviatsionnaya tekhnika, no. 2, 1964, 81-87

TOPIC TAGS: supersonic analogy, supersonic flow, unsteady flow, shock wave, rarefaction wave

ABSTRACT: A quantitative analysis of an unsteady one-dimensional supersonic flow is performed on the basis of a supersonic analogy. Methods for solving boundary value problems using a supersonic analogy are considered which make it possible to calculate unsteady flows with more complicated boundary conditions than those permitted by previously known methods. The analogy between a plane supersonic flow over a convex surface and an unsteady motion of a gas displaced by a piston makes it possible to use the relationships obtained for calculating gas parameters with arbitrary boundary conditions up to the formation of a shock wave (when the piston is retarded)... Curves

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ACCESSION NR: AP4040974

of the velocity distribution along the flow are plotted for various laws of acceleration of the piston. Orig. art. has: 5 figures and 18 formulas.

ASSOCIATION: none

SUBMITTED: 14Dec63

ENCL: 00

SUB CODE: ME:

NO REF SOV: 002

OTHER: 002

ATD PRESS: 3041

Card 2/2

L 26119-65 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWA(1) Pd-1

S/0147/65/000/001/0071/0077

ACCESSION NR: AP5005536

AUTHOR: Pudoveyev, A. P.

TITLE: Turbulent mixing of fluid streams in a confined space with specific features in the introduction of one of the streams

SOURCE: IVUZ. Aviatzionnaya tekhnika, no. 1, 1965, 71-77

TOPIC TAGS: jet mixing, turbulent mixing, mixing zone, boundary layer, velocity profile, fluid dynamics, turbulent flow

ABSTRACT: The problem of the turbulent mixing of fluid streams in a confined space and the effect of the mixing on the structure and parameters of the resulting flow is studied theoretically. As a first approximation, the interaction between transverse streams of an incompressible fluid in a plane channel is considered. The analysis is based on the experimentally established universality of the dimensionless velocity profiles of both liquid and gas jets under various conditions (G. N. Abramovich. Teoriya turbulentnykh struy, Moscow, Fizmatgiz, 1960). The specific characteristics considered are those of a uniform, finite-velocity stream of a fluid injected transversely into a second stream of the same fluid in a channel with a limited mixing zone. It is assumed that the densities of the interacting

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L 26119-65

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ACCESSION NR: AP5005536

streams are the same; the pressure change across the mixing zone and the effect of the viscosity along the channel wall are negligible. Using the equations of continuity, momentum, and energy, an equation is derived for determining the boundaries of the mixing zone. Analytical and graphical solutions of the equation show that the boundary layer expands by the linear law and that the expansion intensity is determined by the ratio of the velocities of the two streams. The mixing zone does not extend over the entire width of the channel, and the mixing zone is localized in the region of the injection of the side stream. The boundary line between the two streams intersects the line of the boundary layer. Orig. art. has: 6 figures and 22 formulas. [PS]

ASSOCIATION: none

SUBMITTED: 14Nov63

ENCL: 00

SUB CODE: ME

NO REF SOV: 001

OTHER: 000

ATD PRESS: 3186

Card 2/2

L 29387-66 EWP(m)/EWT(1)/EWT(m) WW/WE

ACC NR: AP6017841

SOURCE CODE: UR/0147/66/000/002/0151/0153

AUTHOR: Pudoveyev, A. P.

ORG: none

TITLE: Diagram for optimum design of systems of shocks in axisymmetrical diffusers with external pressure //

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 2, 1966, 151-153

TOPIC TAGS: diffuser design, ~~axisymmetrical diffuser~~, supersonic ~~flow~~ diffuser, diffuser, air breathing ~~propulsion~~ propulsion

ABSTRACT: The article proposes a diagram for designing axisymmetrical supersonic multi-shock diffusers which considerably decrease the pressure losses during the stagnation of supersonic air flows. Such a diagram can be used for selecting the optimum geometry of the inner body of a diffuser and for determining the flow parameters. The diagram was constructed for a system consisting of a number of oblique shocks followed by a normal shock. The diagram gives the M number behind a shock and the angles of the shock front and the flow deflection as a function of the M number in front of the shock. Thus, by decreasing after each shock the number of remaining oblique shocks, the overall flow parameters and the geometry of the inner body of a diffuser can be determined. Orig. art. has: 1 figure and 1 formula. [AV]

SUB CODE: 13/ SUBM DATE: 21Nov65/ ORIG REF: 006/ ATD PRESS: 5008
Card 1/1 A C/ JMC: 533.601.172

PUDOVYEV, P.

Building Materials

Experience in planning production of local construction materials, Plan. khoz., No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

L 13984-65 EWT(m)/ENP(w)/EWA(d)/T/ENP(t)/ENP(b) AFWL/SSD/ASD(m)-3 MJW/JD/MLK
S/0000/63/000/000/0120/0122

ACCESSION NR: AT4048126

AUTHOR: Krishtal, M. A., Golovin, S. A., Pudoveyeva, V. P.

TITLE: Measuring the cold brittleness threshold of metal by the internal friction method

SOURCE: Vsesoyuznaya konferentsiya po relaksatsionny* yavleniyam v metallakh i splavakh. 3d, Voronezh, 1962. Relaksatsionny*ye yavleniya v metallakh i splavakh (Relaxation phenomena in metals and alloys); trudy* konferentsii. Moscow, Metallurgizdat, 1963, 120-122

TOPIC TAGS: cold brittleness, cold brittleness threshold, internal friction, steel dislocation mobility

ABSTRACT: The amplitude dependence of the internal friction is a good method for investigating the processes taking place in metals and alloys. The present paper deals with the lowering of the dislocation mobility, leading to a decrease in the dampening decrement, caused by internal dissipation of energy at low temperatures for samples of St. 5 and low-carbon steel annealed in a vacuum at 1000C for 1 hour. The resilience of these steels can also be investigated by this technique. The device for measuring the dampening decrement was described in an article by

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L 13984-65

ACCESSION NR: AT4048126

2

V. V. Khil*chevskiy in 1958 and is shown in Fig. 1 of the Enclosure. The temperature relationship of the dampening decrement of low-carbon steel shows a sharp drop in the decrement between -30 and -75C, due to cold brittleness. The resilience of this steel dropped in the same interval. A similar relationship is given in the paper for St. 5 steel. For St. 5 steel, the upper brittleness threshold is -75C, while the lower one is -90C. Thus, measuring the internal dissipation of energy allows one to find the upper and lower thresholds of cold brittleness. The tests show high stability, therefore requiring only 2 or 3 samples for testing. The high speed of these tests and several other advantages make these tests very useful. Special attention should be paid to a further study of energy dissipation at low temperatures, taking into account stress concentration, type and kind of oscillation, magnetic condition and other factors. Orig. art. has: 4 figures.

ASSOCIATION: Tul'skiy mekhanicheskiy institut (Tula Institute of Mechanics)

SUBMITTED: 10Nov63

ENCL: 01

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

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L 13984-65
ACCESSION NR: AT4048126

ENCLOSURE: 01

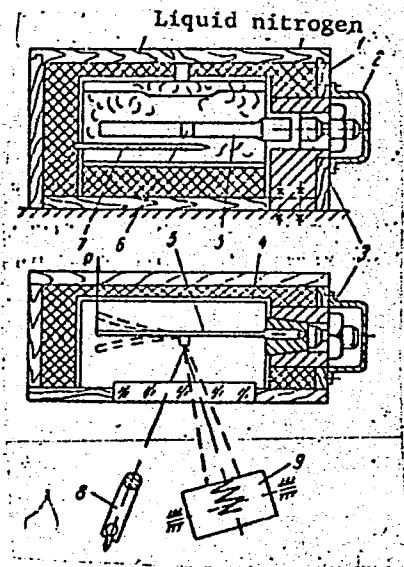


Fig. 1. Diagram of a device for measuring the internal friction at low temperatures.
1 and 4 - double wooden chamber; 2 - cover;
3 - clamp; 5 - tested sample; 6 - reflector;
7 - thermometer; 8 - light; 9 - rotating drum with photo-sensitive paper.

Card 3/3

S/0058/64/000/006/E087/E087

ACCESSION NR: AR4044011

SOURCE: Ref. zh. Fizika, Abs. 6E663

AUTHOR: Krishtal, M. A.; Golovin, S. A.; Pudoveyeva, V. P.

TITLE: Measurement of the threshold of cold shortness of metal by the method of internal friction

CITED SOURCE: Sb. Relaksats. yavleniya v met. i splavakh. M., Metallurgizdat, 1963, 120-122

TOPIC TAGS: internal friction, metal, metal cold shortness, cold shortness threshold

TRANSLATION: Investigates internal friction at low temperatures (from -90 to +20°C) in steel St 5 and low-carbon steel (0.09% C); a parallel study is made of impact toughness. Flat samples are secured by cantilever and placed in a chamber cooled with liquid N₂. Free oscillations of the samples are caused by fast removal of the load applied to the end of the sample. Vibrograms of free oscillations of the samples were recorded by the optical method; values of the decrement were

Card 1/2

ACCESSION NR: AR4041607

S/0137/64/000/005/1040/1041

SOURCE: Ref. zh. Metallurgiya, Abs. 51242

AUTHOR: Krishtal, M. A.; Golovin, S. A.; Pudoveyeva, V. P.

TITLE: Measurement of threshold of cold brittleness of metal by method of internal friction

CITED SOURCE: Sb. Relaksats. yavleniya v met. i splavakh. M., Metallurgizdat, 1963, 120-122

TOPIC TAGS: cold brittleness, metal, internal friction

TRANSLATION: Internal friction was investigated at low temperatures (from -90 to +20°) of steel 5 and low-carbon steel (0.09% C); in parallel was studied a_k of given steels. Flat samples (S) were attached cantilever-wise and placed in chamber cooled with liquid N₂. Free oscillations of sample gave fast removal of load applied toward the end of sample. Vibrograms of free oscillations of

Card 1/2

L 13986-65 EWT(m)/EWP(w)/EWA(d)/ENP(t)/EWP(b) ASD(m)-3/SSD/AFWL/AFTC(p)
MJW/JD/MLK

ACCESSION NR: AT4048128

S/0000/63/000/000/0128/0133

AUTHOR: Krishtal, M. A., Golovin, S. A., Maksimov, S. K., Vayner, Yu. I.,
Baranova, V. I., Pudoveyeva, V. P. 13

TITLE: Internal friction, structure and mechanical properties of alloys deformed
under static and impulse loads

SOURCE: Vsesoyuznaya konferentsiya po relaksatsionny*ye yavleniyam v metallakh i
splavakh. 3d, Voronezh, 1962. Relaksatsionny*ye yavleniya v metallakh i splavakh
(Relaxation phenomena in metals and alloys); trudy* konferentsii. Moscow, Metal-
lurgizdat, 1963, 128-133

TOPIC TAGS: low carbon steel, austenitic steel, ²¹aluminum alloy, internal friction,
alloy structure, cold working

ABSTRACT: The authors investigated the mechanical properties of low carbon steel
(0.90% C), austenitic steel grade 1Kh18N9T and OT-4 and AMg5VM alloys based on
titanium and aluminum, respectively, under static and impulse loads. The phase
condition of the metals was determined by X-ray under initial and deformed condi-
tions. Initially, the OT-4 alloy is a solid solution of alpha-titanium with 3-5%
beta phase containing Ti and Mn. In the other alloys, no noticeable changes were
Card 1/3

L 13986-65

ACCESSION NR: AT4048128

observed. Cold working of the samples was done under tension and in some cases by compression. The ultimate strength was determined on the M/91 machine (East Germany) at a strain rate of 6 mm/min. The flat samples were 120 mm long with a test length of 50 mm. The temperature dependence of the internal friction and rigidity modulus of wire samples (160 mm long and 0.8 mm in diameter) of low carbon steel, 1Kh18N9T steel and the aluminum alloy was determined on the RKF MIS vacuum torque pendulum at 1 cycle/second. Special attention should be paid to 1Kh18N9T steel, which was initially annealed at 1050C and had a single-phase structure. Under cold working, 1Kh18N9T steel reached an ultimate strength of 90 kg/mm² at a deformation of 40%, accompanied by an increased yield point, a sharp drop in elongation and a general lowering of the rigidity modulus. Internal friction was determined by the resonance method on a device designed by the Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys) with flat samples 80 mm long, 6 mm wide and about 1 mm thick at 100 cps. The tests indicate that at low distances the material becomes brittle and sometimes fails due to passage of the critical strain rate for the given material. Brittleness at longer distances is connected with interference interaction of primary and reflected impact waves

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L 13986-65

ACCESSION NR: AT4048128

leading to multiple deformation of the product. The increase in friction between the billet and die is of considerable importance. Plate samples 170 mm long, 11 mm wide and 2 mm thick were used to find the amplitude relationship of internal friction. It was found that surpassing some optimal loading rate may lead to hardening of the material and to simultaneous increase in brittleness due to formation of microcracks. Two competitive mechanisms (strengthening and weakening) appear at the same time under impulse loads. Orig. art. has: 5 figures and 2 tables.

ASSOCIATION: Tul'skiy mekhanicheskiy institut (Tula Institute of Mechanics)

SUBMITTED: 10Nov63

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 001

Card 3/3

100 111 111 111
L 8555-65 EWT(m)/EWP(k)/EWP(q)/EWP(b) Pr-4 AFETR/AFWL/ASD(m)-3/SSD/
RAEM(t) MJM/JD/EH
ACCESSION NR: AR4044215 S/0137/64/000/006/I039/I040

SOURCE: Ref. zh. Metallurgiya, Abs. 6I231

AUTHOR: Krishtal, M. A.; Golovin, S. A.; Maksimov, S. K.; Vayner, Yu. I.;
Baranova, V. I.; Pudoveyeva, V. P.

TITLE: Internal friction, structure, and mechanical properties of statically-
deformed alloys

CITED SOURCE: Sb. Relaksats. yavleniya v met i splavakh. M., Metallurg-
izdat, 1963, 128-133

TOPIC TAGS: internal friction, structure, mechanical property, deformed
alloy, statically deformed alloy, austenitic steel

TRANSLATION: Investigation was conducted on low-carbon steel (0.09% C),
austenitic steel 1Kh18N9T and alloys OT-4 and AMg5VM on Ti- and Al-bases under
conditions of static and pulse loads. Static work hardening of flat samples was pro-
duced by extension and in certain cases by pressing in a special [pinch] die. Tensile
Card 1/3.

L 6985-54

ACCESSION NR: AR4044215

0

tests were done on a machine of type H/91 at a rate of load of 6 mm/min. The temperature trend of internal friction and the shear modulus of plastically deformed wire samples 160 mm long and 0.8 mm in diameter were measured on a vacuum torsional pendulum of type RKF MIS at a frequency of ~1 cps. Static work hardening in this case was carried out by drawing. Steel 1Kh18N9T preliminarily quenched from 1050°, under the influence of work hardening acquires increased hardness; here σ_s attains 90 kg/mm at 40% deformation. An increase of σ_s is accompanied by: 1) an increase in the yield point, which for steel in the initial state does not exceed 0.45 σ_s and attains 0.90 σ_s and more after 40% deformation; 2) a sharp drop of δ and ψ to 10 and 30%, respectively, during 46% deformation; 3) a decrease in the shear modulus. The intensity of the change of the mechanical properties during work hardening is from 10 to 30% greater than for other values of deformation. Lowering of the defect of the shear modulus with 5% deformation is then replaced by its increase. However, the magnitude of the shear modulus in work-hardened steel does not exceed that in initial state. The intensity of a decrease in shear modulus with a rise in temperature in initial- and slightly-deformed steel is greater than in strongly work-hardened samples. For steel in the quenched state, no peaks of internal friction on the curve of the temperature dependence of internal friction is observed. Plastic deformation of 5% creates an internal-

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L 8555-65

ACCESSION NR: AR4044215

friction peak at 60% (connected with diffusion in γ -Fe) and a small peak at 200-300°, which increases up to 35% deformation and disappears at higher degrees of deformation (60%). This latter peak is associated with the formation of Cottrell atmospheres. Pulse loading of sheet material is carried out with explosive forming. The internal friction of deformed billets was measured by the resonance method on cantilevered laminated samples. There is shown the presence, in stamped products, of defects which increase the strength and decrease the plasticity of metals. Comparative analysis of the obtained data (including the amplitude dependence of internal friction) leads to the conclusion that exceeding a certain optimum speed of loading can lead to strong hardening of the material and simultaneously to its embrittlement due to the formation of microcracks. During pulse loading there occurs the simultaneous action of two competing mechanisms - strengthening and weakening. Bibliography: 5 references.

SUB CODE: MM, AS

ENCL: 00

Card 3/3

L 25684-65 EWP(w)/EWT(m)/EWA(d)/EWP(t)/T/EWP(l)/EWP(b) MJW/JD

ACCESSION NR: AR4044545

S/0277/64/000/006/0027/0027

SOURCE: Ref. zh. Mashinostr. mat., konstr. i raschet detal. mashin. Otd. vy+p.,
Abs.6.48.175

AUTHOR: Krishtal, M.A.; Golovin, S. A.; Pudoveyeva, V.P.

TITLE: Measuring the critical cold brittleness in a metal by the method of internal friction

CITED SOURCE: Sb. Relaksats. yavleniya v met. i splavakh. M., Metallurgizdat, 1963, 120-122

TOPIC TAGS: low carbon steel, cold brittleness measurement, internal friction measurement, impact toughness study, cold brittleness threshold

TRANSLATION: The study concerned internal friction in steel No. 5 and a low carbon steel (0.09% C) at low temperatures (-90 to +20C). A parallel study was made of the impact toughness α_k of these steels. Flat samples were attached to console brackets and placed in a chamber cooled by liquid N₂. A rapid removal of loads applied to the end of a sample caused its free oscillation. Vibrograms of free oscillations of a sample were recorded optically and processed by standard methods. Decrement values were taken at

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L 25684-65

ACCESSION NR: AR4044545

a peak normal stress of 6 kg/mm^2 . The temperature dependence of internal friction was recorded by heating the cooled chamber. Samples of low carbon steel were preliminarily hardened, then subjected to plastic deformation by 15% elongation. The sharp drop in internal friction for this steel at -30 to -75°C is attributed to the appearance of cold brittleness in the material. Measurements of α_k indicate its drop over the same temperature range and confirm that these temperatures represent the upper and lower thresholds of cold brittleness in this steel. A similar temperature dependence of internal friction was obtained for steel No. 5, preliminarily vacuum annealed for 1 hour at 1000°C . Data on the variation of internal friction indicate that -75 and -90°C are the upper and lower thresholds for steel No. 5. Results of the measurements correspond to data on impact toughness of unnotched samples. It is concluded that the internal friction method can be used to determine the upper and lower cold brittleness thresholds of steel rapidly and with sufficient accuracy. L. Gordiyenko.

SUB CODE: MM

ENCL: 00

Card 2/2

PUDOVEYEV, A.P.

Supersonic analogy method for calculating unidimensional unsteady
gas flows. Izv.vys.ucheb.zav.;av.tekh. 7 no.2:81-87 '64.

(MIRA 17:9)

ACCESSION NR: AT4040403

S/0000/63/000/000/0353/0356

AUTHOR: Krishtal, M.A.; Golovin, S.A.; Pudoveyeva, V.P.

TITLE: Energy dissipation in some alloys at low temperatures

SOURCE: Nauchno-tekhnicheskoye soveshchaniye po voprosam kolebaniy s ucheton rasseyaniya energii. 4th, 1962. Rasseyaniye energii pri kolebaniyakh uprugikh sistem (Energy dissipation during vibrations of elastic system); trudy* soveshchaniya. Kiev, Izd-vo AN UkrSSR, 1963, 353-356

TOPIC TAGS: steel No. 5, steel 35 GS, low carbon steel, cold brittleness threshold, low temperature energy dissipation, damping decrement, impact toughness

ABSTRACT: Damping decrements in flat samples of steel No. 5 (vacuum annealed 1 hr. at 1000C), steel 35GS (normalized) and a low carbon steel (0.09% C, hardened, deformed 15%) were measured in relation to temperatures ranging from -100 to 20C (methodology described). Analysis of the results obtained, placed the cold brittleness thresholds of the three named alloys at -75 to -90, -58 to -85 and -30 to -75C, respectively. Parallel measurement of impact toughness produced closely corresponding results, especially for unnotched

Card 1/2

ACCESSION NR: AT4040403

samples; the damping decrement method is therefore recommended for measurements of cold brittleness thresholds. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 23Nov63

DATE ACQ: 28May64

ENCL: 00

SUB CODE: MM

NO REF SOV: 002

OTHER: 000

Card 2/2

PUDOVIK, A.N.

Addition of ethyl alcohol to isoprene oxide. A. N. Pudovik and B. B. Ivanov. *Uchenye Zapiski Kazan. Gosudarst. Univ. im. V. I. Ulyanova-Lenina* 116, No. 1, Obshchestv. Nauch. Ser. Khim. 141-4 (1950). Heating 100 ml. abs. EtOH, 17 g. isoprene oxide, and 0.2 ml. $\text{BF}_3 \cdot \text{Et}_2\text{O}$ 10 hrs. at 80-90° gave a range of products contg. 13 g. 3-ethoxy-2-methyl-3-buten-1-ol (I), b_p 55.5-7.5°, d_4^{20} 0.9228, n_D^{20} 1.4385, and 1 g. $\text{C}_{11}\text{H}_{20}\text{O}_2$, b_p 102-5°, 0.9817, 1.4552. Reaction of isoprene oxide with EtOH catalyzed by EtONa gave mainly 1-ethoxy-2-methyl-3-buten-2-ol (II), b_p 45.6-6°, 0.8971, 1.4270. Under comparable conditions BzCl benzoylated I to an extent of 50% and II to 11%. O. M. Kosolapoff.

4
1-4E3d
1-4E4
1-4E2c(7)
2-MAX
NB

PUDOVIK, A.N.; ORLOVA, T.M.

Reactions of isoprene oxide with hydrogen sulfide, mercaptans, and ketones. Zhur.ob.khim. 30 no.8:2614-2617 Ag '60. (MIRA 13:8)

1. Kazanskiy gosudarstvennyy universitet.
(Isoprene)

PUDOVIK, A.N.; KONOVALOVA, I.V.; DEDOVA, L.V.

Rearrangement of α -oxyphosphinic and α -oxythiophosphinic esters to phosphinates and thiophosphates. Dokl. AN SSSR 153 no.3:616-618 N '63. (MIRA 17:1)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-Lenina. Predstavleno akademikom B.A. Arbuzovym.

PUDOVIK, A.N.; ALADZHEVA, I.M.

Claisen rearrangement of allyl esters of thiophosphoric acid. Zhur.
ob.khim. 30 no.8:2617-2624 Ag '60. (MIRA 13:8)

1. Kazanskiy gosudarstvennyy universitet.
(Phosphorothioic acid)
(Allyl compounds)

PUDCOVIK, A.N.; MJRATCVA, A.A.; SUSHENTSOVA, F.F.; ZOREVA, N.M.

Heterochain polymers with phosphorus and oxygen atoms in the main chain.
Polyphosphine phosphates and polyphosphinates. Vysokom.soed. 6 no.2:258-
264 F '64. (MIRA 17:2)

1. Kazanskiy gosudarstvennyy universitet imeni Lenina.

L 25597-66 EWT(m)/ENP(j) RM

ACC NR: AP6016693

SOURCE CODE: UR/0079/65/035/009/1591/1595

AUTHOR: Pudovik, A. N.; Konovalova, I. V.ORG: Kazan' State University (Kazanskiy gosudarstvennyy universitet)

TITLE: Reactions of complete esters of acids of trivalent phosphorus with esters of pyruvic acid

SOURCE: Zhurnal obshchey khimii, v. 35, no. 9, 1965, 1591-1595

TOPIC TAGS: ester, phosphate, organic phosphorus compound

ABSTRACT: The reactions of the methyl and ethyl esters of pyruvic acid with trimethyl and triethyl phosphites were found to depend greatly on the reaction conditions. Under mild conditions (-10 to 0°), high-boiling products (2,2,2-trialkoxy-4,5-dimethyl-4,5-dicarbalkoxy-1,3,2-dioxaphospholanes) were formed in 70-80% yield, along with only very negligible amounts of low-boiling compounds. Under more rigorous conditions, at 100°, the reaction of trialkyl phosphites with pyruvic esters was found to proceed in two directions -- forming up to 30% low-boiling products (dialkyl-alpha-alkyl-alpha-carbalkoxy-ethyl phosphates) and only 40% of the 1,3,2-dioxaphospholanes. A reaction mechanism is proposed, involving attack of phosphite on the electrophilic carbon atom of the carbonyl group of pyruvic ester, with intramolecular rearrangement of the bipolar ion, followed by stabilization of the ion formed in two ways. 2,2-Diethoxy-2-ethyl-4,5-dimethyl-4,5-dicarbalkoxy-1,3,2-dioxaphospholane

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UDC: 547.26.118

L 25597-66

ACC NR: AP6016693

phospholanes were produced by the reaction of the diethyl ester of ethyl-phosphinous acid with the methyl and ethyl esters of pyruvic acid under mild conditions. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 11Jan64 / ORIG REF: 001 / OTH REF: 001

Card 2/2 *EV*

L 26689-66 EWT(m)/EWP(j) JW/RM

ACC NR: AF6016902

SOURCE CODE: UR/0020/65/163/006/1401/1403

AUTHOR: Moshkina, T. M.; Pudovik, A. N. (Corresponding member AN SSSR); Zil'berman, L. V.

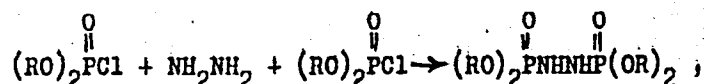
ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvennyy universitet)

TITLE: Phosphorus-containing hydrazo- and azo-compounds

SOURCE: AN SSSR. Doklady, v. 163, no. 6, 1965, 1401-1403

TOPIC TAGS: organic phosphorus compound, ester, hydrazine, hydrazine derivative

ABSTRACT: The authors synthesized esters of azodiphosphoric acid and studied their capacity for addition reactions. In synthesizing esters of azodiphosphoric acid containing aliphatic radicals in ester groups, the authors used the method of oxidizing esters of hydrazodiphosphoric acid. The tetraalkyl esters of hydrazodiphosphoric acid were obtained by a reaction of dialkylphosphoric acid chlorides with hydrazine



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L 26689-66

ACC NR: AP6016902

where R = C_2H_5 , $n-C_4H_9$, $n-C_6H_{13}$, $n-C_8H_{17}$. Reactions of diethyldibutylchlorophosphates with hydrazine were carried out in ether solution at $25 - 30^\circ$, and with dihexyl- and diethylchlorophosphates -- at $40 - 45^\circ$. Symmetrical hydrazodiphosphoric esters were isolated from the reaction mixture and purified by fractional precipitation from benzene solutions with hexane or with petroleum ether. Precipitation was repeated several times. The yield of tetraalkyl esters of hydrazodiphosphoric acid was 60 - 80%. It was found that tetraalkyl esters of azodiphosphoric acid are electrophilic compounds capable of facile and quantitative addition of nucleophilic reagents. Orig. art. has: 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 06Mar65 / ORIG REF: 003 / OTH REF: 003

Card 2/2 BLG

L 25622-66

EWT(m)/EWP(j)/T/ETC(m)-6

IJP(c) NW/RM

ACC NO. AN3016064

SOURCE CODE: UR/0020/65/164/005/1050/1053

AUTHOR: Kirpichnikov, P. A.; Mukmeneva, N. A.; Kolyubakina, N. S.; Pudovik, A. N. 57
(Corresponding member AN SSSR) 8ORG: Kazan' Chemicotechnological Institute im. S. M. Kirov (Kazanskiy khimiko-
tehnologicheskii institut)

TITLE: Interaction of esters of phosphorous acid with 1,1-diphenylethane hydroperoxide

SOURCE: AN SSSR. Doklady, v. 164, no. 5, 1965, 1050-1053

TOPIC TAGS: phosphorous acid, ester, polarographic analysis, reaction rate, polymer

ABSTRACT: A kinetic study was made of the behavior of various aliphatic and aromatic esters of phosphorous acid, mixed esters of pyrocatecholphosphorous acid, and diphosphites in the reaction with 1,1-diphenylethane hydroperoxide, and the influence of the structure of the phosphites used on the rate of the reaction was investigated. Polarographic studies with a dropping mercury electrode revealed that aliphatic phosphites are more active than the aromatic forms. An analogous pattern is observed for esters of pyrocatecholphosphorous acid. The activity series are given for four complete esters of phosphorous acid, five esters of pyrocatecholphosphorous acid, and four diphosphites. The influence of other factors was studied: increasing the concentration of one of the reagents (hydroperoxide:phosphite ratios from 1:10 to 1:1.5) and increasing the temperature (from 20° to 30°) promote an increase in the reaction rate. The patterns of interaction of the hydroperoxide of 1,1-diphenylethane with esters of phosphorous acid were found to be directly dependent upon the inhibiting properties of the latter with respect to thermooxidative destruction of polymers. Orig. art. has 3 figures and 1 table.

SUB CODE: 06

SUBM DATE: 09Apr65

OTH REF: 004

UDC: 547.26'118